

Abstract of the Disclosure

A perceptual model based on psychoacoustic auditory experiments is based on the (time domain) roughness of an input signal envelope in particular cochlea filter bands rather than the *noise-like vs. tonal* nature of the input signal. In illustrative embodiments, frequency domain techniques are used to develop envelope and envelope roughness measures, and such roughness measures are then used to derive Noise Masking Ratio (NMR) values for achieving a high level of noise masking in coder embodiments. Coder embodiments based on present inventive teachings are compatible with well-known AAC coding standards.